

CLAIMS

The following is a copy of Applicant's claims that identifies language being added with underlining ("___") and language being deleted with strikethrough ("—"), as is applicable:

1. (Currently Amended) A method of producing a three-dimensional object, comprising the step of:

disposing at least one layer of a first material onto a first area in an iterative manner using at least one ink-jet printhead, wherein the first material is selected from a build material and a contrast enhancing material;

disposing at least one layer of a second material and the first material on top of the first area using at least one ink-jet printhead, wherein the second material is selected from a build material and a contrast enhancing material, wherein the second material being disposed onto a designated area, wherein the first material being disposed onto a second area, wherein the second area and the designated area are different areas on top of the first area, wherein the first material and the second material are not the same material;

forming an identifiable structure from at least one layer of the second material;

disposing at least one layer of the first material on top of the second area and the designated area using at least one ink-jet printhead; and

forming ~~an~~ the identifiable structure from the second material within the three-dimensional object, wherein the identifiable structure within the three-dimensional object ~~can be~~ being detectable using a non-invasive dimensional imaging device, wherein the three-dimensional structure is selected from: a bone replacement, a dental structure, and a medical device disposed within a body of an individual.

- 2-3. (Canceled)

4. (Previously Presented) The method of claim 1, further comprising:

forming a plurality of identifiable structures within the three-dimensional object.

5. (Original) The method of claim 1, further comprising:
wherein the identifiable structure is fabricated from the build material.
6. (Original) The method of claim 1, wherein the identifiable structure is fabricated from the contrast enhancing material.
7. (Original) The method of claim 1, further comprising:
wherein the identifiable structure is fabricated from the contrast enhancing material and includes at least one air-gap within the identifiable structure, wherein the combination of the contrast enhancing material and the air-gap define structure selected from a letter, a number, a symbol, an icon, an emblem, a logo, a sign, a bar code, a reference mark, a unique shape, a pattern and combinations thereof.
8. (Original) The method of claim 1, wherein the non-invasive dimensional imaging device includes devices selected from X-ray devices, magnetic imaging devices, computerized axial tomography (CAT) scan devices, ultrasound devices, and computerized topography devices.
9. (Original) The method of claim 1, wherein the contrast enhancing material is selected from nano-particles, micro-particles, colorants, and combinations thereof.
10. (Original) The method of claim 1, wherein the identifiable structure is selected from a letter, a number, a symbol, an icon, an emblem, a logo, a sign, a bar code, a reference mark, a unique shape, a pattern and combinations thereof.
- 11-25. (Canceled)

26. (New) The method of claim 1, further comprising:
disposing a third material onto a portion of the designated area, wherein the second material is a contrast enhancing material, wherein the third material is a contrast enhancing material, wherein the second material and the third material are different contrast enhancing materials;
forming a second identifiable structure embedded within the identifiable structure using the third material, wherein the identifiable structure within the three-dimensional object being detectable using a second non-invasive dimensional imaging device.
27. (New) The method of claim 1, further comprising:
planing each layer of the first material; and
curing each layer of the first material.
28. (New) The method of claim 27, further comprising:
planing each layer of the second material; and
curing each layer of the second material.
29. (New) The method of claim 1, wherein the three-dimensional structure is selected from: a bone replacement.